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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,477	08/31/2001	Satoru Tange	SHC0144	1533

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EXAMINER

AFTERGUT, JEFF H

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 03/18/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/944,477

Applicant(s)

TANGE, SATORU

Examiner

Jeff H. Aftergut

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1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3, 5. 6) ☐ Other: .

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Claim Rejections - 35 USC § 102/103

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ness.

Ness taught that it was known at the time the invention was made to form a composite elastic which included the steps of providing an elastic material and intermittently bonding the elastic to a nonwoven fabric on both the upper and lower surfaces of the elastic material. the applicant is specifically referred to column 3, lines 8-13 for the intermittent bonding techniques utilized. Additionally at column 3, lines 13-15, the reference to Ness suggested that the substrate which was to be gathered after the lamination operation was formed from nonwoven materials. The reference additionally suggested that prior to the lamination operation, the elastic material was either in a non-stretched or partially stretched condition (column 1, lines 34-37, column 2, lines 17-23, column 4, lines 49-51, claim 14). the reference additionally suggested that those skilled in the art would have stretched the assembly subsequent to the bonding operation (whether one partially stretched the elastic or fed the elastic in an unstretched condition to the

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laminating mechanism), see column 3, lines 16-36, column 5, lines 24-43. while the reference did not express that the nonwoven was formed from thermoplastic fibers, the reference clearly envisioned that the nonwoven materials would have been formed from thermoplastic fibers in that the substrates utilized to join to the elastic material were all thermoplastic substrates.

Applicant is advised that the thermoplastic material of the substrates is what was used to permit the bonding of the layers together. It is therefore believed that in all embodiments where a nonwoven material was utilized as the substrate that the same was formed from nonwoven thermoplastic fibers. It nonetheless would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the techniques of Ness to attain a composite elastic which was gathered and extensible wherein the nonwoven materials included thermoplastic filaments therein.

Regarding claim 4, the reference to Ness suggested that one skilled in the art would have utilized films for the elastic layer of the composite.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ness in view of Austin et al.

The reference to Ness is discussed at length above in paragraph 3 and applicant is referred to the same for a complete discussion of the reference. The reference failed to make

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mention of the use of thermoplastic filaments which were mechanically engaged and/or fusion bonded for the nonwoven materials. Additionally, the reference failed to make mention of the use of different webs for joining to the elastic core wherein each substrate material was supplied with varying properties. The applicant is advised, however that the use of the specified nonwoven materials for the substrate layers in Ness would have been obvious to those of ordinary skill in the art at the time the invention was made in light of the teaching of Austin. More specifically, Austin suggested that those skilled in the art would have known to utilize continuous filaments for the nonwoven layer 11 which was suitably formed via a spun bonding operation and then thermally bonded using conventional processing, see column 3, lines 5-25. the reference additionally suggested that two webs of different properties would have been joined upon opposed sides of the elastic material such as described with reference to webs 11 and 14, see column 3, lines 45-50 for the description of the materials used for the fibers of layer 11 which included blends of polyethylene and polypropylene and column 5, lines 21-40 for a description of the fibers used for the layer 14 which included either polypropylene or polyethylene (but not blends of the polymers). The reference to Austin suggested that subsequent to the stretching operation, the inelastic fibrous webs were stretched beyond their elastic limit and distorted as a result of the same. while the reference did not expressly state that one skilled in the art would have separated the fibers which were thermally or mechanically joined in the nonwoven into individual fibers, one skilled in the art viewing the same would have understood that such would have intrinsically happened when stretching such a material followed by relaxation. The applicant is advised that the individualizing of the fibers of the nonwoven was a function of the stretching operation performed subsequent to the lamination of the elastic to the

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nonwoven and that both Ness and Austin suggested this processing. Because the reference performed the same processing on similar materials to that claimed, one would have expected the same resulting laminate to have been formed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the fibrous webs of material described by Austin et al in the manufacture of a composite laminate which included an elastic central core material wherein the same was stretch bonded with both preliminary stretching of the elastic prior to stretching followed by stretching subsequent to the formation of the composite.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 703-308-2069. The examiner can normally be reached on Monday-Friday 6:30-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Jeff H. Aftergut
Primary Examiner
Art Unit 1733

JHA
March 13, 2003